Appendix D: Conditions of Approval Applicable to Surface Disturbing Activities other than Oil and Gas Leasing

Introduction

Table D-1 lists the Conditions of Approval (COAs) for projects involving surface-disturbing activities described throughout this Proposed Resource Management Plan/ Final Environmental Impact Statement (PRMP/FEIS). These COAs may apply to surface-disturbing activities; uses and occupancy associated with land use authorizations; conditions or provisions under which an Application for Permit to Drill (APD) is approved; and permits and leases issued for public lands managed by the Bureau of Land Management (BLM) in the Kremmling Field Office (KFO).

The COAs would not apply to activities or uses where they are contrary to applicable laws, rules, regulations, standards, policies, or guidelines. The intent is to maintain consistency, to the extent possible, with the Goals, Desired Outcomes, and Management Actions described under the four proposed alternatives analyzed in this DRMP/DEIS and the proposed plan in relation to the application of COAs to all surface-disturbing activities, uses, and occupancy.

Surface-disturbing activities are those that, normally, result in more than negligible (immeasurable, not readily noticeable) disturbance to vegetation and soils on public lands and that accelerate natural erosion processes. Whether surface-disturbing activities are considered more than negligible may be determined based upon the extent, duration, or intensity of the activity; the existing condition of the area affected; and the compatibility, or incompatibility, of the activity with another resource value or use. In general, surface disturbances are more than negligible if the impact would last longer than 2 years, and/or would require re-vegetation rather than natural recovery in order to restore the area to pre-disturbance conditions within 1 or 2 growing seasons.

For the purposes of this PRMP/PEIS, surface (ground) disturbances that normally result in greater-than-negligible impacts lasting more than 2 years include, but are not limited to, the following:

- construction of permanent, or other long-term, facilities (such as telecommunication towers and pipelines);
- new road construction, including the upgrading of existing two-track roads;
- mechanical scraping, excavation, or digging; and/or
- oil and gas operations, and mining.

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Additional activities that may result in greater-than-negligible impacts, depending upon the intensity and duration of the activity and pre-disturbance conditions, include, but are not limited to:

- use of mechanized earth-moving equipment that damages vegetation and disturbs the soil (such as tracked vehicles);
- cross-country motorized and mechanized travel in areas designated as Limited or Closed to OHV use; or cross-country motorized travel on less than 12 inches of snow;
- vegetation treatments that scarify the soil, if natural recovery or re-vegetation of the treated area would be expected to require more than 2 growing seasons, and if the treatments are incompatible with a resource value being protected by a No Surface Occupancy (NSO) or No Ground Disturbance (NGD) COA;
- construction of range improvements, including stock ponds and installation of fencing, if such improvements are incompatible with a resource value being protected by a NSO/NGD COA;
- intensive and/or large-scale human use or occupation (such as concentrated group events); and/or
- use of explosives or pyrotechnics.

Activities that are not considered surface-disturbing activities include, but are not limited to, livestock grazing, cross-country hiking or horseback riding, and vehicular travel on designated routes.

Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
Air	Dust Abatement: Project Operators shall be required to implement dust-abatement measures, as needed, in order to prevent fugitive dust resulting from vehicular traffic, equipment operations, or wind events. The Authorized Officer may direct the Operator to change the level, and type, of treatment (watering or application of various dust agents, surfactants, and road-surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust. In addition, fugitive dust control plans would be required.
Air	Engine Emissions: New and existing natural gas fired reciprocating internal combustion engines at oil and gas field compression facilities shall meet Colorado Department of Public Health and Environment (CDPHE) Air Quality Control Commission (AQCC) Regulation No. 7 Emission Standards for new and relocated engines, regardless of when the engines begin operation. All engines shall comply with applicable U.S. Environmental Protection Agency (EPA) emission standards.
Air	VOC Emission Requirements: For oil and gas operations, emission controls for glycol dehydrators and condensate tanks shall be required, without regard to the quantity of uncontrolled volatile organic compound (VOC) emissions from the equipment. VOC emissions from new glycol dehydrators shall be reduced by achieving, at least, 95 percent control of VOC emissions from glycol dehydrator vents. VOC emissions from condensate tanks shall be reduced by, at least, 95 percent from uncontrolled emission levels.
Soils	Soil Erosion and Steep Slopes: Generally, steep slopes shall be avoided, and alternate locations considered. In general, mechanical soil disturbances shall be limited to slopes less than 40 percent. For proposed projects, the length of the slope, soil conditions, and the extent of the disturbance shall be considered; exemptions may be allowed. Erosion-control measures, Monitoring Plans, and Adaptive Management actions may be required on erosive sites in order to ensure long-term soil health and stability.
Water and Riparian Vegetation	Water and Riparian Resource Buffers: Surface disturbances shall be relocated, where possible, in order to protect domestic water supplies, with up to a 1,000-foot buffer for domestic wells and springs. If recharge areas are identified, then these shall also be maintained. A 100-foot buffer shall be applied for perennial streams and springs/seeps, and a 50-
	foot buffer shall be applied for intermittent/ephemeral drainages. Exemptions may be allowed, depending upon the purpose/extent of disturbance. Best Management Practices (BMPs) or additional erosion-control actions may be required for surface disturbances within 500 feet of perennial waters and 100 feet of intermittent/ephemeral waters. Buffers may need to be extended in order to protect wetland vegetation or function, and to reduce invasive vegetation establishing within wetland areas, depending upon the extent of the disturbance.
Fisheries/Aquatic Wildlife	Native Fish and Important Sport Fish Surface-disturbing activities may be prohibited for in-channel work during appropriate spring and fall spawning periods from April 1 to August 1 (for rainbow and cutthroat trout) and fall spawning periods from October 1 to November 30 (for brown and brook trout).

Appendix D: Conditions of Approval Applicable to Surface Disturbing Activities other than Oil and Gas Leasing

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Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
Wildlife and Plants	Biological Inventories in Special Status Species Habitat In areas of known, or suspected, habitat of Special Status Species (Federally Listed, Proposed, Candidate and BLM Sensitive), or significant plant communities, a biological inventory may be required prior to approval of surface-disturbing activities. The inventory will be used in the environmental analysis (in accordance with the NEPA). Mitigation measures designed to reduce the impacts of surface disturbance on the affected species or their habitats may be required.
Wildlife	Core Wildlife AreasSurface Occupancy or use may be prohibited on core wildlife areas to help reduce fragmentation. (Core wildlife areas are areas of high habitat value for multiple species, including sage-grouse, elk, and mule deer.)
Wildlife and Special Status Species	High Value Wildlife Habitat—In areas that contain high-value wildlife habitat, such as, but are not limited to, habitat for Special Status Species, big game severe winter range, big game migration corridors, and priority moose habitat. The Operator may be required to implement specific measures in order to reduce impacts of oil and gas or geothermal operations on wildlife and wildlife habitat. Special design and construction measures designed to mitigate impacts, may include, but are not limited to, relocation of roads, well pads, pipelines, and other facilities; and fencing operations or habitat. The lessee/Operator may be required to submit a plan for avoidance or mitigation of impacts on the identified species to the Authorized Officer.
Big Game	Big Game Crucial Winter Range (Severe Winter Range and Winter Concentration Areas) Surface-disturbing activities may be prohibited during the following time period(s) in mapped crucial winter habitat in order to reduce behavioral disruption of big game during the winter season on crucial winter habitat as mapped by the Colorado CPW. (NOTE: This COA would not apply to operation and maintenance of production facilities): • Antelope: Dec. 1 to April 30 • Rocky Mountain/Desert Bighorn sheep: Dec. 1 to April 30 • Mule deer/White-tailed deer: Dec. 1 to April 30 • Elk: Dec. 1 to April 30 • Moose: Dec. 1 to April 3
Big Game	Big Game Production Areas: Antelope, Rocky Mountain Bighorn Sheep, Mule deer/White-tailed deer, Elk, Moose Surface-disturbing activities may be prohibited during the following time period(s) in mapped big game production areas: • Antelope: April 15 to June 30 • Rocky Mountain Bighorn sheep: April 15 to June 30 • Mule deer/White-tailed deer: April 15 to June 30 • Elk: April 15 to June 30 • Moose: April 15 to June 30
Migratory Birds	Migratory Bird Nesting Habitat Surface-disturbing activities shall avoid or minimize disruption of migratory bird nesting activity, especially during the core nesting season (from May 15 to July 15).
Raptors	Raptor Nesting Habitat In general, surface-disturbing activities may be prohibited

Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:		
Raptors	 within the proximity of active and Ferruginous Hawk, Peregrin 0.125-mile to 0.5 mile radius Bald Eagle: 0.25-mile radius (unoccupied for 5 consecutiv Golden Eagle: 0.125-mile to Osprey, Red-tailed Hawk, Son Hawk, Northern Harrier, Burexception of MSO: 0.125-mile Raptors. Active Nest Sites Sunthe following time period(s): 	e Falcon, Prairie Falcons s, or within 100 meters we years, but with all of 2.25-mile radius wainson's Hawk, Coo rrowing Owl, Great ho ile to .25-mile radius	on, and Northern Goshawk: s of abandoned nests or part of the nest remaining) per's Hawk, Sharp-shinned orned Owl, and all owls with
	Species	Time Period	Buffer from Active Nest Site
	Osprey	April 1 to Aug 31	0.25 mile
	Red-tailed Hawk	Feb 15 to Aug 15	0.25 mile
	Swainson's Hawk:	April 1 to Aug 15	0.25 mile
	Cooper's Hawk	April 1 to Aug 15	0.25 mile
	Sharp-shinned Hawk	April 1 to Aug 15	0.25 mile
	Northern Harrier:	April 1 to Aug 15	0.25 mile
	Burrowing Owls	March 15 to Aug 15	0.25 mile
	Great horned Owl	Feb 1 to Aug 15	0.25 mile
	Ferruginous Hawk	Feb 1 to Aug 15	0.5 mile
	Peregrine and Prairie Falcon	March 15 to July 31	0.25 mile to 0.5 mile
	Northern Goshawk	March 1 to Aug 15	0.25 mile to 0.5 mile
	Bald Eagle	Nov 15 to July 31	0.25 mile to 0.5 mile
	Golden Eagle	Dec 15 to July 15	0.25 mile to 0.5 mile
	Other owls and raptors	March 1 to Aug 15	0.25 mile
Waterfowl and	Waterfowl and Shorebird Habitat	and Rookeries Surf	ace-disturbing activities may

Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
shorebirds	be prohibited within 0.25 miles of significant production areas in order to protect waterfowl and shorebird habitat and rookeries.
Waterfowl and Shorebirds	Shorebirds, Waterbirds, and Waterfowl Nesting Habitat Surface-disturbing activities may be prohibited during the following time period:
	 March 1 to July 31, in areas designated for waterfowl, shorebird, and waterbird production by Field Offices.
Endangered Species Act	Endangered Species Act: The BLM may recommend modifications to surface disturbing activities to further conservation and management objectives in order to avoid BLM-approved activity that would adversely affect listed species or their habitat. The BLM may require modifications to (or disapprove) proposed activity that is likely to result in jeopardy to the continued existence of a Proposed or Listed Threatened or Endangered Species, or result in the destruction or adverse modification of a designated or proposed critical habitat. The BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until its obligations under applicable requirements of the ESA are completed, including completion of any required procedure for conference or consultation.
Sensitive Amphibians	BLM Sensitive Amphibians Site-specific restrictions within a 0.5-mi (800-meter) buffer around all known, or identified, breeding sites may be required for surface-disturbing activities.
Special Status Species Plants	Significant Plant Communities and Relict Vegetation For those plant communities that meet the BLM's criteria for significant plant communities, special design, construction, and implementation measures, including relocation of operations by more than 200 meters (656 feet), may be required for surface-disturbing activities.
Special Status Species Plants	Threatened, Endangered, Proposed, and Candidate Plants Surface-disturbing activities may be prohibited within a 200-meter (656-foot) buffer around occupied habitat for Federally Listed Species, Proposed Species, Candidate Species, and in areas designated as critical habitat. Also see Appendix W for a list of conservation measures.
Special Status Species Plants	BLM Sensitive Plant Species For plant species listed as Sensitive by the BLM, special design and construction measures may be required for surface-disturbing activities within a 100-meter (328-foot) buffer around occupied habitat. In addition, relocation of operations by more than 656 feet (200 meters) may be required in order to protect BLM Sensitive plant species from direct and indirect impacts, including loss of habitat.
Least Tern, Snowy Plover, and Piping Plover	Least Tern, Snowy Plover, and Piping Plover Nesting Habitat: Surface occupancy or use may be prohibited on the lands described below in order to protect the integrity of nesting habitat: Production areas, as mapped by the RLM or by the CPW
Special Status	 Production areas, as mapped by the BLM or by the CPW. Mountain Plover Nesting Habitat Surface-disturbing activities may be prohibited
Special Status Special Status	during the following time period(s):
	• April 10 to July 31, in suitable nesting habitat, as mapped by the BLM or by the

Table D-1: COAs for Surface-Disturbing Projects

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Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
Greater Sage- grouse	Road Development and Operation in Greater Sage-grouse Habitat: Coordinate road construction and use among Federal fluid mineral lessees and ROW holders.
Greater Sage- grouse	Important Sage-Grouse Habitat: In areas that contain important Greater Sage-grouse habitats, as identified by the BLM, either currently or prospectively, specific measures may be required through a COA in order to reduce impacts on the Greater Sage-grouse population and habitat quality. Sage-grouse habitat conservation measures may include timing restrictions, distances or percentages of allowable surface-disturbing activities, noise-suppression actions, or other constraints consistent with State or Range-wide Sage-grouse Conservation Planning for Colorado (including subsequent updates), current peer reviewed sage-grouse research, or as developed in conjunction with the CPW, in order to meet local population objectives.
Greater Sage- grouse	Noise Shields in Priority Habitat: In priority habitat, require noise shields when drilling during the lek, nesting, brood-rearing, and wintering seasons.
Greater Sage- grouse	<u>Underground Mining</u> in Priority Habitat: Plan any new appurtenant facilities outside of priority areas. Where new appurtenant facilities associated with the existing lease cannot be located outside the priority sage-grouse habitat area, colocate new facilities within existing disturbed areas. If this is not possible, then build any new appurtenant facilities to the minimum standard necessary for the action.
Columbian Sharp-tailed Grouse	Columbian Sharp-tailed grouse Leks Surface-disturbing activities may be prohibited within a .4 mile-radius of leks.
Columbian Sharp-tailed Grouse	 Columbian Sharp-tailed grouse Winter and Nesting Habitat Surface-disturbing activities may be prohibited in the listed habitat during the following time period(s): Nesting Habitat: March 15 to July 30, suitable nesting habitat within 1.25-mile radius of active leks or mapped nesting habitat Winter Habitat: Dec 1 to March 15, mapped Columbian Sharp-tailed grouse winter range
Wild Turkey	Wild Turkey Winter Habitat Surface-disturbing activities may be prohibited in the listed habitat during the following time period(s):
Greater Sandhill Crane	 Mapped Wild Turkey Habitat: December 1 to April 1 Greater Sand Hill Crane Nesting, Roosting, Staging, and Migration Habitat Surface-disturbing activities may be prohibited during the following time period: March 1 to Oct 16, in areas designated for sandhill crane production or migration habitat use by Field Offices
Mexican Spotted Owl	Mexican Spotted Owl Suitable Breeding Habitat Surface-disturbing activities may be subject to the following special operating constraints: Maintenance of identified constituent elements for Mexican Spotted Owl breeding habitat
Mexican Spotted Owl	Mexican Spotted Owl Primary Activity Centers Surface-disturbing activities may be prohibited on the lands identified as Primary Activity Centers (PACs) for Mexican Spotted Owls.

Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
Mexican Spotted Owl	Mexican Spotted Owl Suitable Breeding Habitat Surface-disturbing activities may be prohibited during the following time period(s):
	Mexican Spotted Owl: March 1 to August 31
Bats	Bat Maternity Roosts and Hibernacula Surface-disturbing activities may be prohibited within 0.25-mile-radius of known maternity roosts or hibernacula of BLM Sensitive bat species.
White-tailed Prairie Dog	 Designated Prairie Dog Towns Surface disturbing activities that include current or historically occupied prairie dog towns, as mapped by the CPW or by the BLM, or by both, may require 1 or more of the following conservation measures in order to maintain the integrity and extent of prairie dog complexes: development of a Surface Use Plan of Operations with the BLM that integrates and coordinates long-term lease development with measures necessary in order to minimize adverse impacts to prairie dog populations or their habitat; special daily and seasonal activity restrictions during the reproductive period (from March 1 to June 15); special modifications in order to minimize involvement of prairie dog burrow systems; and provide in-kind compensation for habitat loss and/or displacement (such as
	special on-site prairie dog habitat enhancement) when appropriate [See Map MLP17 in Appendix A.]
Cultural	Historic Properties Surface-disturbing activities may be prohibited within 656 feet (200 meters) of historic properties.
Cultural	Windy Gap Cultural Research Natural Area (RNA) Surface-disturbing activities shall be prohibited in the Windy Gap Cultural RNA.
Cultural	Significant Sites Within and Near the North Sand Hills Special Recreation Management Area (SRMA) Surface-disturbing activities may be prohibited at significant sites and newly identified areas of Native American tribal concerns.
Cultural	Heritage Areas (Traditional Cultural Properties) Surface-disturbing activities may be prohibited within 0.25 mile of traditional cultural properties or Native American tribal areas of concern in order to protect the integrity of place, setting, and/or feeling.
Paleontology	Class 4 and Class 5 Paleontological Areas An inventory by an accredited Paleontologist, approved by the Authorized Officer, may be required in Class 4 and Class 5 paleontological areas prior to any surface-disturbing activities.
Visual Resources	Visual Resources Management (VRM) Class I Areas In general, surface-disturbing activities shall be prohibited in VRM Class I Areas.
Visual Resources	VRM Class II Areas Surface-disturbing activities may be restricted in VRM Class II Areas with slopes over 30 percent and high visual sensitivity.
Recreation and Visitor Services	Developed Recreation Facilities and Trails In general, relocation may be required for surface-disturbing activities proposed on, or near, current and future developed recreation sites; and near currently mapped and future national/regional trails, local system trails that connect communities, and trailheads and interpretive

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Resource	COA:
	sites with exceptional recreation values or significant public interest.
Extensive Recreation Management Areas	Project Location in ERMAs: Site-specific relocation of proposed projects may be required in order to minimize conflicts with recreation opportunities, recreation setting characteristics, and visitor health and safety within the following Extensive Recreation Management Areas (ERMAs): • Headwaters
Special Recreation Management Areas	Surface Disturbing Activities in SRMAs: Surface-disturbing activities may be prohibited in the following Special Recreation Management Areas (SRMAs) in order to minimize impacts to: 1) the prescribed physical, social, and operational recreational setting characteristics; 2) the targeted recreation opportunities (including recreational activities, experiences and outcomes); and 3) public health and safety:
	 Upper Colorado River North Sand Hills Strawberry Wolford
	Forest management projects would occur within the Strawberry SRMA. During project planning and design recreation setting characteristics would be protected wherever possible; however in some cases, recreation setting characteristics may be modified within a project area to meet forest management and public health and safety objectives.
Coal	North Park Known Recoverable Coal Resource Area (KRCRA) and Other Areas of Coal Resources Surface-disturbing activities may be prohibited in some areas within the North Park KRCRA, and in other areas where coal resources are determined to occur.
Oil and Gas	Drilling Multiple Wells from a Single Pad Drilling multiple wells per well pad may be required to limit the number of surface locations in scenic areas, fragile soil areas, or important wildlife habitat while still allowing the necessary number of downhole locations.
Oil and Gas	Colocation of Surface Disturbances Colocation of surface disturbances (e.g. powerlines, roads, pipelines) in common corridors, and development of a comprehensive transportation network, may be required, where technically feasible, in order to eliminate unnecessary surface disturbances and fragmentation of habitat.
Oil and Gas	Centralizing Production Facilities Liquid gathering pipeline systems feeding centralized offsite production facilities may be required in order to reduce year-round fluids haul traffic during the life of the field in areas of important wildlife habitat.
Areas of Critical Environmental Concern	Areas of Critical Environmental Concern (ACECs) Surface-disturbing activities may be prohibited within ACECs.
Wilderness Study Areas	Surface Disturbing Activities in WSAs: In general, surface-disturbing activities shall be prohibited in Wilderness Study Areas (WSAs); however, in rare circumstances some surface-disturbing activities may be allowed in WSAs, provided that such activities comply with the specific policy guidance of H-8550-1, Interim Management Policy for Lands Under Wilderness Review (BLM 1995).

Table D-1: COAs for Surface-Disturbing Projects

Resource	COA:
North Sand Hills WSA	Motorized Recreation Use in NSH WSA: Motorized recreational use may be allowed in designated portions of the sand dunes within the North Sand Hills WSA, provided that such use complies with the specific policy guidance of H-8550-1, Interim Management Policy for Lands Under Wilderness Review (BLM 1995).
Lands with Wilderness Characteristics	Surface Disturbing Activities in lands with wilderness characteristics: Surface-disturbing activities may be allowed on lands with wilderness characteristics outside existing WSAs, provided that such activities comply with the guidance of Management and Setting Prescriptions for Areas with Wilderness Characteristics (see Appendix H), and the primary purpose is to protect or enhance wilderness characteristics.
Wild and Scenic Rivers	Surface Disturbing Activities Along NWSR Segments: Surface-disturbing activities may be prohibited within 0.25 miles of the centerline of recommended suitable segments of river.
Watchable Wildlife Areas	Surface Disturbing Activities in WWAs: Surface-disturbing activities may be prohibited in WWAs. Habitat and range improvements, low-impact interpretive trails and facilities, and facilities designed to ensure public health and safety, and to protect other resources, would be allowed.